

WHAT IS CLAIMED IS:

1 1. A bellows-type pipe junction for joining a first pipe end
2 of a first pipe with a second pipe end of a second pipe
3 having a spacing distance between the first pipe end and
4 the second pipe end, said pipe junction comprising:

5 a first sleeve section configured and dimensioned to
6 be fitted onto the first pipe end;

7 a second sleeve section configured and dimensioned to
8 be fitted onto the second pipe end;

9 a flexible offset section located and extending
10 between said first and second sleeve sections, having a
11 first end adjacent to said first sleeve section and a
12 second end adjacent to said second sleeve section;

13 a first flexible joint connecting said first end of
14 said offset section with said first sleeve section; and

15 a second flexible joint connecting said second end of
16 said offset section with said second sleeve section.

1 2. The bellows-type pipe junction according to claim 1,
2 wherein said first and second flexible joints are
3 respective first and second folded bellows joints.

1 3. The bellows-type pipe junction according to claim 1,
2 wherein said first and second sleeve sections, said offset
3 section, and said first and second flexible joints are all
4 integral and continuous with one another and form a single

monolithic component consisting of a single continuous material.

4. The bellows-type pipe junction according to claim 1, wherein said first flexible joint at said first end of said offset section is arranged and configured to be located in or extend into the first pipe end.

5. The bellows-type pipe junction according to claim 1, wherein said first flexible joint comprises three coaxial portions that have different diameters and overlap each other and are successively joined to one another to form a Z- or S-shaped cross-sectional configuration, having an externally open gap between an innermost one and a middle one of said coaxial portions, and having a gap adapted to receive a pipe wall of the first pipe end between an outermost one and said middle one of said coaxial portions.

6. The bellows-type pipe junction according to claim 1, wherein said first end of said offset section includes a transition portion that has a conically tapering inner diameter and that is configured to be plugged into the first pipe end.

7. The bellows-type pipe junction according to claim 1, wherein said second end of said offset section includes an annular lip seal configured and dimensioned to extend into the second pipe end.

1 **8.** The bellows-type pipe junction according to claim 1,
2 wherein said second flexible joint comprises a radially
3 outwardly protruding folded rim arranged between and
4 joining said second end of said offset section and said
5 second sleeve section.

1 **9.** The bellows-type pipe junction according to claim 1,
2 wherein said second flexible joint comprises a conically
3 flared portion extending and conically outwardly flaring
4 from said second sleeve section, and an undulating bellows
5 portion transitioning from a smaller diameter of said
6 second end of said offset section to a larger diameter of
7 said flared portion.

1 **10.** The bellows-type pipe junction according to claim 1,
2 wherein said second sleeve section includes an axially
3 compressible bellows portion.

1 **11.** A pipe joint arrangement comprising:
2 a first pipe having a first pipe end;
3 a second pipe having a second pipe end spaced apart
4 from said first pipe end; and
5 a bellows-type pipe junction that joins said first
6 pipe end with said second pipe end;
7 wherein said pipe junction comprises:
8 a first sleeve section fitted onto said first pipe
9 end;

10 a second sleeve section fitted onto said second pipe
11 end;

12 a flexible offset section located and extending
13 between said first and second sleeve sections, having a
14 first end adjacent to said first sleeve section and a
15 second end adjacent to said second sleeve section;

16 a first flexible joint connecting said first end of
17 said offset section with said first sleeve section; and

18 a second flexible joint connecting said second end of
19 said offset section with said second sleeve section.

1 **12.** In an aircraft having an aircraft fuselage, a first pipe
2 having a first pipe end in or extending from said fuselage,
3 a drain mast mounted on said fuselage and including a
4 second pipe having a second pipe end, and a bellows-type
5 pipe junction joining said first pipe end with said second
6 pipe end,

7 an improvement wherein said pipe junction comprises:

8 a first sleeve section fitted onto said first pipe
9 end;

10 a second sleeve section fitted onto said second pipe
11 end;

12 a flexible offset section located and extending
13 between said first and second sleeve sections, having a

14 first end adjacent to said first sleeve section and a
15 second end adjacent to said second sleeve section;
16 a first flexible joint connecting said first end of
17 said offset section with said first sleeve section; and
18 a second flexible joint connecting said second end of
19 said offset section with said second sleeve section.